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EXCHANGE RATES AND THE TRADE DEFICIT

Summary

There is growing frustration at the failure of the weakening dollar to stem the expanding U.S. trade deficit. It has now been 18 months since the dollar's peak in late February 1985, and a year since the September 22, 1985 five-nation agreement to lower its value against other currencies. Despite the decline, the trade deficit climbed to a \$175 billion annual pace during the first seven months of this year, well above last year's \$148.5 billion. Slow growth in the economies of major trading partners, structural changes in the U.S. economy, and the willingness of foreign producers to accept lower profits rather than raise prices all appear to be delaying the impact that the dollar's decline was expected to have on the trade deficit.

The continued expansion of the trade deficit has fueled protectionist pressures in Congress. Japan, which accounts for one-third of the U.S. deficit, has received much of the blame for this country's trade problems. Its huge capital outflows have made it the largest net creditor nation, reflecting its high saving rate. Japan's net assets may reach as high as \$400 billion by the end of the decade, while the United States, already the largest debtor nation, is saddled with a foreign debt that could hit \$650 billion.

Rising Impatience with the U.S. Trade Deficit

The deterioration in the trade balance has had serious consequences for important sectors of the U.S. economy. The diversion of domestic demand to

imported goods has been the major cause of sluggish growth since mid-1984. The economy grew at only a 2.2 percent real annual pace in the first half of 1986, well below the revised Reagan administration forecast of 3.2 percent, and the long-heralded recovery in the second half is proving elusive. Federal Reserve Board chairman Paul Volcker recently warned that the trade deficit is creating a "difficult and dangerous situation," and that the "key to the economic outlook and growth for more than a year is going to be what happens in the trade balance." Mr. Volcker predicted that if this country's exports do not accelerate within a year, the economy could fall into a recession, with serious consequences in a world facing developing-country debt problems.

As the leading trader and investor, the United States has greatly benefited from the liberalization of the world trading system. But the size of the deficit has eroded support for free trade. An April 1986 poll, for example, reported that 45 percent of Americans believe that trade with Japan is bad for this country. Doubts about the benefits of free trade are reflected in the protectionism espoused by Congress, which last fall passed the Jenkins textile-apparel bill, the first blatantly protectionist piece of legislation to pass both houses since the Smoot-Hawley Tariff of 1930. The August 6 vote to override the presidential veto of the bill failed by only eight votes. At the end of June, 248 bills containing import-restrictive provisions were pending.

Even the Reagan administration's commitment to free trade has frayed badly during the past few months under congressional pressure. Since the spring, Washington has asked Japan and three other countries to limit their exports of machine tools; concluded an agreement with Japan that is rapidly raising the prices of semiconductors; signed new, restrictive textile-apparel agreements with Korea, Hong Kong and Taiwan; and upped the ante in its agricultural export subsidy battle with the European Community.

In Japan the escalating trade surplus has created an embarrassment of riches that the government's annual economic report called the country's most urgent economic problem. Tokyo reported a \$38.4 billion trade surplus in the first six months of 1986, compared to \$23.1 billion in 1985's first half. For the year, it is likely to reach the \$84.8 billion mark predicted by the Organization for Economic Cooperation and Development. With its large capital outflows, Japan replaced Great Britain as the world's largest creditor nation in 1985, with \$129.8 billion in net assets. A report by the United Nations Conference on Trade and Development (UNCTAD) predicted that if current trends continue, "Japan would become the largest creditor country in history by the turn of the decade, with an unprecedented \$400 billion of net external assets and a substantial net investment income."

Causes of the Trade Imbalance

Japan, which accounted for one-third of the 1985 U.S. deficit (nearly one-half if oil is excluded), receives much of the blame for this country's trade problems. On his July visit to Tokyo, Commerce Secretary Malcolm Baldrige warned that protectionist action is likely if Japan's imports fail to increase. Seventy-four of the protectionist trade bills pending in Congress

would restrict Japanese imports. Many imply a link between Japanese trade barriers and the size of the bilateral deficit.

But the degree of market openness cannot explain the sharp rise in Japan's trade surplus with the United States, given Tokyo's efforts to lower trade barriers during the past several years. The large trade imbalances are instead a result of economic policies pursued in Washington and Tokyo. During the past five years, the two governments have followed divergent fiscal paths. While Japan has been steadily reducing its government budget deficit, the United States has run deficits in the range of \$200 billion annually. Although the trade impact of these fiscal policies was unintended, they have had a major effect on both the overall balance in each country and the bilateral balance.

A nation's current account balance is determined by the difference between domestic saving and investment. When domestic investment and the government budget deficit do not absorb private saving, the remainder is invested overseas. That overseas investment must be matched by a corresponding current account surplus. A current account deficit occurs when domestic investment and the government deficit exceed private saving. The shortage of domestic saving is offset by an inflow of capital from abroad that matches the current account deficit. Changes in interest rates and currency values equilibrate the international trade and investment flows.

In 1985 gross private investment in the United States was \$661.1 billion and the fiscal deficit (including federal, state and local government) was \$136.3 billion. Adding these figures together, the total demand for funds was \$797.4 billion. Meanwhile, gross private saving (by individuals and corporations) totaled \$687.8 billion. Private sector saving thus fell short of the demand for funds by \$109.6 billion. The required inflow of foreign capital approximates (allowing for statistical discrepancy) the U.S. current account deficit of \$117.7 billion.

In Japan, in contrast, government budget deficits have been declining since 1980. With private investment at relatively low levels compared to the rapid growth era, the demand for funds has been insufficient to absorb Japan's high level of private saving. As a result, Japan has invested a portion of its saving abroad, which is matched by a current account surplus.

Washington has blamed the "pro-saving, anti-investment" bias in Japan's tax system for the large trade imbalance, while Tokyo identifies the large U.S. budget deficits as the source of the problem. An analysis of the changes in the bilateral trade balances of Japan and the United States with other countries since 1981 (the last year both countries had current account surpluses) indicates that the root of the problem lies primarily in this country. Except for the Organization of Petroleum Exporting Countries, the U.S. trade balance deteriorated across the board (see Table 1). Japan and the European Community each accounted for more than one-fourth of the \$108 billion increase in the U.S. trade deficit, while Latin America, the newly industrialized countries of Asia (Taiwan, Korea, Hong Kong and Singapore) and Canada made significant contributions.

Table 1: U.S. Trade Balance, 1981 and 1985

(in billions of dollars, exports f.a.s., imports c.i.f.)

	<u>1981 Trade Balance</u>	<u>1985 Trade Balance</u>	<u>Increase in Deficit</u>	<u>Share of Increase in U.S. Deficit</u>
Japan	\$-18.1	\$-49.7	\$31.7	29.1%
European Community	8.7	-22.5	31.2	28.6
Latin America	1.3	-18.1	19.4	17.8
Newly Industrialized Nations*	-7.0	-25.0	18.0	16.5
Canada	-7.3	-22.2	14.9	13.7
Other Developed Countries	5.3	-3.8	9.1	8.4
Other Developing Countries	2.9	-1.2	4.1	3.8
Communist Bloc	4.2	0.8	3.4	3.2
OPEC**	-29.7	-6.8	-22.9	-21.0
Total	-39.6	-148.5	108.9	100.0

*Includes Taiwan, Korea, Hong Kong and Singapore.

**Excludes Venezuela and Ecuador.

Source: Department of Commerce

Table 2: Japan's Trade Balance, 1981 and 1985

(in billions of dollars, exports f.o.b., imports c.i.f.)

	<u>1981 Trade Balance</u>	<u>1985 Trade Balance</u>	<u>Increase in Surplus</u>	<u>Share of Increase in Japan's Surplus</u>
United States	\$13.3	\$39.5	\$26.2	70.1%
OPEC*	-32.1	-23.2	8.8	23.6
China	-0.2	6.0	6.2	16.6
European Community	10.3	11.1	0.8	2.1
Newly Industrialized Nations**	12.3	12.7	0.3	0.9
Other Developed Countries	-1.3	-1.3	0.1	0.2
Communist Bloc***	2.0	1.7	-0.3	-0.7
Latin America	3.8	2.2	-1.6	-4.3
Other Developing Countries	0.5	-2.6	-3.1	-8.4
Total	8.7	46.1	37.4	100.0

*Excludes Venezuela and Ecuador.

**Includes Taiwan, Korea, Hong Kong and Singapore.

***Excludes China.

Source: Ministry of Finance

If the cause of Japan's widening trade surplus lay in Tokyo, one would expect the increase to be spread evenly among its trading partners. Instead, the United States alone accounts for 70 percent of the increase and OPEC accounts for 24 percent (see Table 2). Had Japan's balance with OPEC and this country remained at 1981 levels, its 1985 trade surplus would have been only \$11.1 billion. Thus the underlying cause of the imbalance lies largely in the United States.

The U.S. Trade Deficit

Despite the decline in the dollar, many economists remain pessimistic about the prospects for a substantial improvement in the U.S. trade balance. U.S. Trade Representative Clayton Yeutter said last week that the trade deficit will approach \$200 billion this year. In the absence of additional policies in Western Europe and Japan to stimulate domestic demand, reduction of the deficit will require a further decline in the dollar. Although the administration expects the trade deficit to begin shrinking later this year, it is unlikely that it will improve quickly. The OECD expects only an \$8 billion decline in the U.S. trade deficit in 1987.

On a trade-weighted basis, the dollar has fallen 11.4 percent against the currencies of this country's 20 largest trading partners since February 1985, with most of the decline coming after the September 1985 five-nation agreement to lower the dollar's value (see Table 3). The dollar's decline has been moderated by its failure to depreciate relative to the currencies of many major developing countries. In contrast to the sharp decline against the yen and the German mark, the dollar has remained constant against the Canadian currency and appreciated against the Korean won since February 1985. The value of the won is based on a basket of currencies heavily weighted to the dollar and recent administration efforts to discuss exchange rates with Seoul have been rebuffed.

Moreover, some observers believe that the realignment of exchange rates cannot adequately lower the U.S. trade deficit for several reasons. One is that U.S. exports are limited by modest growth in many of this country's important trading partners. The administration has strongly urged Japan and West Germany, which both recorded negative growth in the first three months of 1986, to adopt more stimulative policies. In addition, the debt problems of developing countries limit U.S. exports.

On the import side, it is also clear that foreign producers will not give up market share in this country without a struggle. After several years of substantial earnings, they are willing to cut costs and sacrifice profits rather than lose market share by raising prices by the full amount of the currency changes. Japanese exporters, for example, passed on only 53.8 percent of the yen's rise in the form of price increases in the eight months from September 1985 (see Table 4). The pass-through ratios for basic industrial intermediates such as steel and nonferrous metals are especially low. In 1978, in contrast, rapid growth and high inflation in the United States and other industrialized countries enabled Japanese firms to raise prices by the full amount of the yen's appreciation without sacrificing export volume.

Table 3: Changes in Dollar Relative to Currencies of Major Trading Partners

<u>Currency of*</u>	<u>Share of U.S. Trade in 1985**</u>	<u>Percentage Change from End of February 1985 September 1985</u>	<u>September 2, 1986</u>
Canada	20.3%	-0.9%	0.1%
Japan	16.5	-8.7	-40.7
Mexico	5.7	19.3	57.1
West Germany	5.3	-14.5	-39.1
United Kingdom	4.7	-20.1	-27.0
Taiwan	3.9	0.0	-5.7
Korea	2.9	5.8	4.8
France	2.8	-15.0	-34.8
Italy	2.6	-8.1	-32.5
Hong Kong	2.0	0.2	-0.0
Netherlands	2.0	-15.2	-39.3
Brazil	2.0	-0.4	-6.5
Venezuela	1.8	9.0	50.5
Australia	1.5	3.6	17.2
Belgium	1.5	-14.3	-37.4
China	1.4	4.5	31.0
Singapore	1.4	-1.5	-5.1
Saudi Arabia	1.1	2.0	4.9
Sweden	1.1	-10.6	-26.9
Switzerland	1.0	-17.7	-42.4
Trade-Weighted Average		-4.0	-11.4

*Since August 1986 inflation rates are not available for most countries, all percentage changes are calculated using nominal exchange rates. Admittedly, it is real, not nominal rates, that affect trade flows. Among industrial countries, though, changes in nominal exchange rates have closely paralleled changes in real rates. For Mexico and Brazil, two countries with rapidly rising price levels, September 1985 nominal exchange rates were adjusted based on reported inflation rates and the September 1986 rate was adjusted based on projected inflation rates. Excluding Mexico and Brazil, the dollar declined 5.9 percent through September 1985 and 16.8 percent through September 2, 1986.

**The top 20 trading partners listed above accounted for 81.5 percent of U.S. trade (exports plus imports) in 1985.

Source: International Monetary Fund and Journal of Commerce.

Table 4: Share of Yen's Rise Reflected In Export Prices

(September 1985 to April 1986)

<u>Industry</u>	<u>Percent</u>
Steel	-1.0%
Nonferrous Metals	8.6
Chemicals	26.8
Textiles	40.0
Precision Machinery	60.3
Electric Machinery	66.2
Automobiles	71.9
Nonelectric Machinery	72.4

Source: Bank of Tokyo, Tokyo Financial Review, July 1986.

Another line of argument holds that structural changes in the economy lessen the effect of currency changes on the trade deficit. Outsourcing by U.S. manufacturers, for example, has made many firms dependent on Japanese imports. According to a study by the Japan External Trade Organization, about 30 percent of Japan's shipments to this country in 1984 were closely linked to U.S. manufacturing activities. Moreover, many of the products now imported by this country, such as compact discs and video cassette recorders, are not made here.

Even if currency changes have the hoped-for effect on trade, the possibility remains that the dollar will reverse course and return to its high levels of the past few years. According to Martin Feldstein, former chairman of the Council of Economic Advisers, "It [is] not currency intervention or coordinated jawboning that have depressed the dollar since September but the basic fundamentals of the decline in international interest differentials and the reduction in projected U.S. budget deficits." Should the budget cuts not materialize and interest rate differentials increase, the dollar is likely to appreciate again.

Since economists estimate that it takes 18 to 24 months for a currency devaluation to improve the trade balance, it is still too early to conclude that exchange rate changes are ineffective. Moreover, since the dollar devaluation did not occur all at once but has been stretched out over 18 months, it is natural that the improvement will take longer than expected. But there are a few signs that it is beginning. In the April-June quarter, inflation-adjusted U.S. exports increased for the third consecutive quarter and were nearly 3 percent above year-earlier levels.

Japan's Trade Surplus

With a nearly 20 percent rise in exports and a small decline in imports, Japan's trade surplus hit a record \$38.4 billion in the first six months of 1986. Many observers, though, believe Japan's trade surplus will begin falling by the end of the year, given the sharp appreciation of the yen. The yen has risen 68.3 percent on a trade-weighted basis against the currencies of Japan's

top 20 trading partners during the past 18 months (see Table 5). While this revaluation has begun to affect trade flows, changes in the volume of trade thus far have been overwhelmed by the shift in the terms of trade. This year's white paper on international trade estimates the J-curve effect accounted for 70 percent of the rise in value of Japanese exports in FY 1985.

Table 5: Changes in Yen Relative to Currencies of Major Trading Partners

<u>Currency of*</u>	<u>Share of Japan's Trade in 1985**</u>	<u>Percentage Change from End of February 1985 September 1985</u>	<u>September 2, 1986</u>
United States	29.8%	9.5%	68.6%
China	6.2	14.5	120.9
Saudi Arabia	4.6	11.7	76.8
Australia	4.2	13.4	97.7
Indonesia	4.0	12.5	74.9
Korea	3.7	15.9	76.7
United Arab Emirates	3.3	9.5	68.7
West Germany	3.2	-6.4	2.7
Canada	3.0	8.5	68.8
Taiwan	2.8	9.5	59.0
Hong Kong	2.4	9.7	68.6
United Kingdom	2.1	-12.5	23.2
Malaysia	2.1	5.3	69.8
Singapore	1.8	7.9	60.1
Soviet Union	1.4	0.7	30.0
Iran	1.3	2.4	35.9
Oman	1.2	9.5	87.7
France	1.1	-6.9	9.9
Thailand	1.0	5.6	56.8
Switzerland	1.0	-9.8	-2.8
Trade-Weighted Average		8.5	68.3

*Since August 1986 inflation rates are not available for most countries, all percentage changes are calculated using nominal exchange rates. Admittedly, it is real, not nominal rates, that affect trade flows. Among industrial countries, though, changes in nominal exchange rates have closely paralleled changes in real rates.

**The top 20 trading partners listed above accounted for 80.3 percent of Japanese trade (exports plus imports) in 1985.

Source: International Monetary Fund and Journal of Commerce.

The strong yen, combined with slower growth in major trading partners, cut Japan's export volume 0.5 percent in the first six months of 1986 compared to the same period a year earlier. There have been sharp drops in some products (see Table 6), as Japanese goods became less competitive in overseas

markets. Korea, for example, instructed domestic producers earlier this year to find European and U.S. suppliers for 30 industrial, electronic and chemical products currently imported from Japan. In addition, currency changes have encouraged Japanese firms to manufacture overseas, also reducing exports. According to a report by the U.S. Labor Department, the average Japanese worker now makes the equivalent of \$9.22 per hour, more than six times higher than the rate in Taiwan and Korea and up to 71 percent of the \$12.97 earned by U.S. workers. In 1984 Japanese workers earned about four times the hourly wage rate in Taiwan and Korea and only half the American rate.

Table 6: Japan's Export Volume, January-June 1986

(percentage change from first half of 1985)

<u>Industry</u>	<u>Percent</u>
Color Televisions	-51.6%
Cement	-34.0
Steel Bars	-33.0
Toys	-24.0
Binoculars	-23.0
Polyester Fiber	-20.5
Tires	-5.3
Trucks	-4.6
Forklifts	-3.6
Rolled Steel Products	-3.5
Personal Computers	-1.6
Machine Tools	-1.4
Automobiles	11.6
Cotton Fiber	4.8
Video Cassette Recorders	14.2
Cameras	14.8
Semiconductors	16.0
Acrylic Fibers	16.2
Watches	25.8
Photocopiers	45.4

Source: The Economist, August 9, 1986.

The impact of exchange rate changes on Japanese imports is limited by the low ratio of manufactured goods to total imports. According to Sumitomo Bank, Ltd., demand for raw material imports is much less sensitive to price changes (with a price elasticity of 0.24) than is demand for manufactured goods (with a price elasticity of 0.81). In 1985 manufactured goods accounted for only 31 percent of Japanese imports, compared to 60 to 75 percent for the United States, West Germany, Great Britain and France. Despite this distribution, Japan's imports increased 10.2 percent in volume terms in the first six months of 1986 compared to year-earlier levels. The rise was led by a 23.7 percent jump in manufactured imports, although most of it was due to a temporary surge in gold imports for use in minting commemorative coins. According to an econometric study by Sumitomo Bank, assuming an exchange rate of Y180=\$1.00, manufactured imports will increase \$8.3 billion in FY 1986.

In summary, Japan's trade surplus will recede gradually, as the decline in the volume of exports accelerates and the volume of manufactured imports increases. OECD officials estimate that Japan's surplus will fall by \$4 billion in 1987. But given its high saving rate, it is likely that Japan's trade surplus at the end of the decade will remain substantial.

Conclusion

It is unlikely that huge U.S. trade deficits offset by equally large capital inflows can continue indefinitely. Once foreign investors refuse to continue making large net investments in this country, the trade deficit will no longer be sustainable. Martin Feldstein believes that the United States will run major trade surpluses in the 1990s. A trade surplus will be necessary to service this country's foreign debt, which the Institute for International Economics estimates will reach \$650 billion by the end of the decade. Interest payments on a debt of that size will absorb at least 2 percent annually of U.S. gross national product.

Since the U.S. deficit accounted for most of the rise in Japan's trade surplus, its reduction should encourage a contraction in Japan's surplus. With the foreign sector becoming a drag on the economy, Japan will depend on domestic demand, as it did during the 1970s. During that decade, the external sector accounted for more than half of the country's growth only once; in four years it was a negative factor (see Table 7). The external sector is likely to slow growth in 1986, making structural reforms, such as those proposed by the Maekawa Commission, important to boost growth.

Table 7: Components of Japan's Economic Growth

(real growth in percent)

	<u>Total Rate</u>	<u>Domestic Component</u>	<u>External Component</u>	<u>Current Account Surplus*</u>
FY 1970	8.3%	8.9%	-0.7%	\$2.3
FY 1971	5.3	4.0	1.3	6.3
FY 1972	9.7	10.6	-0.8	6.2
FY 1973	5.3	7.5	-2.2	-3.9
FY 1974	-0.2	-2.8	2.6	-2.3
FY 1975	3.6	2.0	1.6	0.1
FY 1976	5.1	3.6	1.5	4.7
FY 1977	5.3	4.2	1.0	14.0
FY 1978	5.1	6.9	-1.8	11.9
FY 1979	5.3	4.8	0.5	-13.9
FY 1980	4.6	1.4	3.3	-7.0
FY 1981	3.6	1.9	1.7	5.9
FY 1982	3.4	3.0	0.4	9.1
FY 1983	3.9	2.2	1.8	24.2
FY 1984	5.3	4.0	1.3	37.0
FY 1985	4.2	3.5	0.7	55.0

*In billions of dollars.

Source: Economic Planning Agency

Meanwhile, Japan will continue to run a large trade surplus, estimated at about 4.1 percent of GNP this year, and will supply capital to the rest of the world. Tokyo's role is certainly not unique in economic history; at the height of the British Empire, Britain's surplus reached 3.8 percent of GNP, while the U.S. surplus in the years following World War II rose as high as 4 percent. Japanese capital exports during the past few years have benefited the United States by preventing a rise in interest rates and supporting the economic expansion.

Some observers have urged Japan to curb its high saving rate to bring its international accounts back into balance. But it is unwise to encourage a rich country to consume more when developing nations are short of capital. World Bank president Barber Conable has called Japan's trade surplus "a world asset" that should be mobilized for development aid.

At present the bulk of Japan's surplus is invested in industrialized countries, particularly the United States. Several weeks ago, Masayoshi Ito, chairman of the Liberal Democratic Party's Policy Affairs Research Council, assailed Japanese companies for pouring earnings into U.S. securities instead of investing in countries with unemployment problems and high foreign debt burdens. Financial innovations will be required to encourage such a shift, however. During his recent visit to Tokyo, Mr. Conable reported that the World Bank has begun studying a variety of approaches intended to recycle Japan's surplus to the developing countries.

For further information, contact Randall S. Jones.

The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.

NOTE

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